

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference DST 92	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/KR2004/003100</b>	International filing date(day/month/year) <b>27 NOVEMBER 2004 (27.11.2004)</b>	Priority date (day/month/year) 28 NOVEMBER 2003 (28.11.2003)
International Patent Classification (IPC) or national classification and IPC  <b>IPC7 B65D 51/28</b>		
Applicant  <b>CHO, YOUNG-KOOK</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☒ (sent to the applicant and to the International Bureau) a total of 8 sheets, as follows:
    - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_ containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:
  - ☒ Box No. I Basis of the report
  - ☐ Box No. II Priority
  - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - ☐ Box No. IV Lack of unity of invention
  - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - ☐ Box No. VI Certain documents cited
  - ☐ Box No. VII Certain defects in the international application
  - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand  <b>12 AUGUST 2005 (12.08.2005)</b>	Date of completion of this report  31 OCTOBER 2005 (31.10.2005)
Name and mailing address of the IPEA/KR Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer  CHOI, Ki Hyuk  Telephone No. 82-42-481-5894 

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/003100

## Box No. 1 Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☒ This report is based on translations from the original language into the following language English which is the language of a translation furnished for the purposes of:
    - ☐ international search (under Rules 12.3 and 23.1(b))
    - ☒ publication of the international application (under Rule 12.4)
    - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
  - ☐ the international application as originally filed/furnished
  - ☒ the description:
    - pages 1 - 14, 16, 18 - 56 as originally filed/furnished
    - pages\* 15, 17 received by this Authority on 12/08/2005
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☒ the claims:
    - pages 57 - 72 as originally filed/furnished
    - pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19
    - pages\* 73 - 74-4 received by this Authority on 12/08/2005
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the drawings:
    - pages \_\_\_\_\_ as originally filed/furnished
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
  - ☐ the description, pages \_\_\_\_\_
  - ☒ the claims, Nos. 66 - 69
  - ☐ the drawings, sheets \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, Nos. \_\_\_\_\_
  - ☐ the drawings, sheets \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/003100

## Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	2 - 18, 20 - 65 , 70 - 81	YES
	Claims	1, 19	NO
Inventive step (IS)	Claims	2 - 8, 10 - 18, 20 - 65 , 70 - 81	YES
	Claims	9	NO
Industrial applicability (IA)	Claims	1 - 65 , 70 - 81	YES
	Claims	None	NO

### 2. Citations and explanations (Rule 70.7)

The following documents identified in the International Search Report have been considered for the purpose of this report:

D1: US 4,591,050 A  
D2: US 4,793,475 A  
D3: US 6,045,254 A  
D4: JP 04-109030 U

#### 1. Novelty

The invention of claim 1 is a bottle comprising a bottle body, an additive storage container provided with an insertion and an exposed part, an opening unit, and separation means for removing the additive storage container from the mouth of the bottle body.

The invention of claim 19 is a bottle comprising a bottle body, an additive storage container having a cylindrical additive storage part and a discharge port, and an opening unit having an end plate, a main cap, and a slider.

D1 discloses a package equivalent to the bottle body of claims 1 and 19, a cup equivalent to the additive storage container of claims 1 and 19, a cap (4) equivalent to the opening unit of claims 1 and 19, and a bridge (21) equivalent to the separation means of claim 1.

Said cup (2) of D1 comprises a lower portion (2"), an upper portion (2"), and a rim (5). The lower portion and the upper portion are equivalent to the insertion of claim 1, and the rim (5) is equivalent to the exposed part of claim 1. Said cup (2) of D1 also has a cylindrical shape and a discharging portion when the bridge (21) is cut. The cylindrical shape and the discharging portion are respectively equivalent to the cylindrical additive storage part and the discharge port of claim 19. Said cap (4) of D1 comprises a screw cap cover (10) equivalent to the end plate and the main cap of claim 19, and a collar (9) equivalent to the slider of claim 19.

(Continued in Supplemental Box.)

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.  
Continuation of:

BOX V.

Therefore, all the technical features of claims 1 and 19 are disclosed in D1, and claims 1 and 19 do not satisfy the requirement of PCT Article 33(2) in respect of novelty.

D1 discloses a bridge equivalent to the separation means of claims 1 to 9, 32 to 49 and 70 to 81 of the present application, and a cap having a collar equivalent to the slider of claims 14 to 45, and 50 to 65.

D2 discloses a partition wall (22) equivalent to the valve body of claims 3 to 8, 12 and 13.

D3 also discloses a valve part (14) equivalent to the valve body of claims 3 to 8, 12 and 13.

D4 discloses a rotation block (6) equivalent to the ratchet of claims 40 to 45.

However, the elevating protrusion of claims 2 to 8, the mouth of the bottle body of claim 9 formed in a double injection molding process, the ring-type stopper and the hook of claims 10 and 11, the locking groove of claims 13 and 14, the partition wall of claims 14 to 18, the outside protrusion and outside hooking protrusion of claims 20 to 31, the cutting protrusion of claims 32 to 49, the hook protrusion of claims 50 to 58, the bursting film of claims 59 to 65 and 70 to 72, and the plug of claims 73 to 81 are disclosed in neither D1 nor D2.

Therefore, claims 2 to 18, 20 to 65 and 70 to 81 satisfy the requirement of PCT Article 33(2) in respect of novelty.

2. Inventive Step

Claim 9 defines the bottle body of claim 1 having a mouth of the bottle body formed in a double injection molding process, but the double injection molding process is a wellknown process for making a bottle and obvious to the person skilled in the art.

Therefore, claim 9 does not satisfy the requirement of PCT Article 33(3) in respect of inventive step.

However, the technical features of claims 2 to 8, 10 to 18, 20 to 65, and 70 to 81 are not obvious to the person skilled in the art and cannot be readily achieved from any of the prior art D1 to D4.

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**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.  
Continuation of:

previous page.

However, the technical features of claims 2 to 8, 10 to 18, 20 to 65 and 70 to 81 are not obvious to the person skilled in the art and cannot be readily achieved from any of the prior art D1 to D4.

Therefore, claims 2 to 8, 10 to 18, 20 to 65 and 70 to 81 satisfy the requirement of PCT Article 33(3) in respect of inventive step.

### 3. Industrial Applicability

The inventions of claims 1 to 65 and 70 to 81 relate to a bottle capable of containing two kinds of materials and easily mixing them at an exact mixture ratio. Therefore, claims 1 to 65 and 70 to 81 possess industrial applicability according to PCT Article 33(4).